ANSWER 2 OF 16 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2003:583085 BIOSIS
DN PREV200300572894
TI BARRETT'S EPITHELIUM AS A LOW RESISTANCE SHUNT ACROSS THE ESOPHAGEAL BARRIER. .
AU Rendon-Huerta, Erika [Reprint Author]; Valenzano, Mary C.; Trembeth, Susan; Hameed, Burhan; Kothari, Rupal; Mercogliano, Giancarlo; Meddings, Jonathan B.; Thornton, James J.; Mullin, James M.
CS Wynnewood, PA, USA
SO Digestive Disease Week Abstracts and Itinerary Planner, (2003) Vol. 2003, pp. Abstract No. T924. e-file.
Meeting Info.: Digestive Disease 2003. FL, Orlando, USA. May 17-22, 2003. American Association for the Study of Liver Diseases; American Gastroenterological Association; American Society for Gastrointestinal Endoscopy; Society for Surgery of the Alimentary Tract.
DT Conference; (Meeting)
Conference; (Meeting Poster)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 10 Dec 2003
Last Updated on STN: 10 Dec 2003
AB The permeability of an endogenous and exogenous marker across the gastroesophageal tract of control patients vs patients with prediagnosed Barrett's metaplasia was evaluated. The activity of the salivary isoform of amylase was evaluated in patients' serum with blood samples being drawn at the time of upper endoscopy. In addition, two weeks post endoscopy, patients orally consumed a solution of 100 gms of sucrose in 200 cc of water at bedtime, followed by collection of overnight urine output. Sucrose amount in urine, a measure of sucrose diffusion across the upper GI tract into the bloodstream, was determined by HPLC. Although salivary amylase (mw 55,000) levels in the blood of control and **Barrett**'s patients were not distinguishable, the **Barrett**'s Esophagus patients showed almost 4-fold increased **leakage** of sucrose (mw 342) out of the lumen of the upper GI tract. For 20 control patients, the mean urine sucrose was 65 mg +/- 4 mg (SEM). For 8 Barrett's patients, the mean urine sucrose was 160 mg +/- 37 mg (SEM) ($P < 0.02$, Student's t test). Mucosal biopsies of normal esophageal epithelium from both Barrett's patients and control patients, and of Barrett's epithelium itself, were evaluated for expression levels of occludin, claudin-1 and claudin-2 by Western immunoblot. Occludin was found in all three groups, and showed no difference in expression level (on a per mg total protein basis) among the three groups. Claudin-1 however was sharply lower in Barrett's epithelium than in normal squamous epithelium. Barrett's epithelium showed only 50% of the level of claudin-1 seen in normal squamous epithelium. Claudin-2 was consistently absent in all normal squamous epithelial biopsies. However two of the eight patients' Barrett's epithelium biopsies manifested readily detectable levels of claudin-2. Induction of claudin-2 and sharply elevated leakage of sucrose might indicate relative tight junctional leakiness in Barrett's epithelium. They may also be risk factors for future development of esophageal adenocarcinoma. (Work supported by a grant from the John S. Sharpe Fndn.)..

L9 ANSWER 3 OF 16 DRUGU COPYRIGHT 2004 THOMSON DERWENT on STN
AN 2003-11494 DRUGU T
TI Barrett's esophagus and esophageal adenocarcinoma: pathogenesis, diagnosis, and therapy.
AU Spechler S J
CS Univ.Texas-Southwestern
LO Dallas

=> fil reg
FILE 'REGISTRY' ENTERED AT 14:03:53 ON 03 JUN 2004

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 2 JUN 2004 HIGHEST RN 688737-01-1
DICTIONARY FILE UPDATES: 2 JUN 2004 HIGHEST RN 688737-01-1

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

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L91 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2004 ACS on STN
RN **9032-08-0** REGISTRY
CN **Amylase, gluco- (9CI)** (CA INDEX NAME)
OTHER NAMES:
CN α-1,4-Glucan glucohydrolase
CN **γ-Amylase**
CN 1,4-α-D-Glucan glucohydrolase
CN Acid amyloglucosidase
CN Agidex
CN AMG
CN AMG (enzyme)
CN AMG 200L
CN AMG 300L
CN AMG 50L
CN Amigase
CN **Amylase AG 150L**
CN Amylo 300
CN Amyloglucosidase
CN Amyloglucosidase 300L
CN Amyloglycosidase
CN Brimac
CN Diazyme
CN Diazyme L 200
CN Distillase
CN E.C. 3.2.1.3
CN Esadex AG 900
CN Exo-α-1,4-glucanase
CN exo-1,4-α-D-Glucosidase
CN Exo-1,4-α-glucosidase
CN G-Zyme G 990SP
CN Gammylo 300L
CN **Glucamylase**
CN Glucan 1,4-α-glucosidase
CN **Glucoamylase**
CN **Glucose amylase**
CN Glucozyme DBK
CN Glucozyme NL

CN Gluczyme
CN Gluczyme AF 6
CN Gluczyme NL 4.2
CN Glukopol P
CN Glutase S
CN **Glycoamylase**
CN Glyukozim L 400
CN Optidex
CN Optidex 300A
CN Optidex L300A
CN Speedase MK
CN Spezyme
CN Sumizyme 3000
CN Sumizyme AL
CN Sumizyme CU
CN Uniase 60
CN Validase GA
AR 152923-54-1, 152923-55-2
DR 9037-13-2, 37185-63-0
MF Unspecified
CI MAN
LC STN Files: AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, TOXCENTER, USPAT2, USPATFULL
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Conference; Dissertation; Journal; Patent; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
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*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
6010 REFERENCES IN FILE CA (1907 TO DATE)
176 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
6012 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:374217

REFERENCE 2: 140:374008

REFERENCE 3: 140:373998

REFERENCE 4: 140:355949

REFERENCE 5: 140:341025

REFERENCE 6: 140:338004

REFERENCE 7: 140:320261

REFERENCE 8: 140:320059

REFERENCE 9: 140:320038

REFERENCE 10: 140:317403

L91 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2004 ACS on STN
RN **9000-92-4** REGISTRY
CN **Amylase (9CI)** (CA INDEX NAME)
OTHER NAMES:
CN Amylolytic enzymes
CN Amylopol P
CN Amylosa enzyme
CN Amzyme 60
CN Amzyme TX 8
CN Aquasim 240L
CN Aquazym Ultra
CN Biodiastase 1000
CN Biodiastase 1000/2000
CN Biodiastase 2000
CN Dabiase K 27
CN Diastase
CN Diramyl
CN Duramyl
CN Duramyl 300L
CN Duramyl 60T
CN Ecostone A 200
CN Enzylase C
CN Enzyme S 120L
CN Enzyme S 280L
CN Enzymes, amylolytic
CN Fetilase
CN Gamylo 200L
CN Glucozyme DB
CN Glycogenase
CN Kleistase M 20
CN Kleistase M 5
CN Kleistase T
CN Kleistase TU 20
CN Kokugen T
CN Lactose RCS
CN Malt diastase
CN Miola
CN Mylase 100
CN Natalase
CN Neospitase K
CN Optimax HP 7525
CN Raktase SuperConc
CN Rapidase 2M
CN Rohalase M
CN Seyco Desize 2000
CN Termamyl 50T
CN Termozym
CN Thermoamylase
CN Tyazyme L300
CN Veron AC
CN Veron Bake
CN Veron GK
DR 8049-91-0, 9000-93-5, 9014-71-5
MF Unspecified
CI COM, MAN
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB,

DIOGENES, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Book; Conference; Dissertation; Journal; Patent; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
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18974 REFERENCES IN FILE CA (1907 TO DATE)
88 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
18982 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:380736

REFERENCE 2: 140:376469

REFERENCE 3: 140:376466

REFERENCE 4: 140:374313

REFERENCE 5: 140:373186

REFERENCE 6: 140:373182

REFERENCE 7: 140:373134

REFERENCE 8: 140:372414

REFERENCE 9: 140:372175

REFERENCE 10: 140:372163

L91 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2004 ACS on STN
RN **9000-90-2** REGISTRY
CN **Amylase, α- (9CI)** (CA INDEX NAME)
OTHER NAMES:
CN **α-Amylase**
CN 1,4-α-D-Glucan glucanohydrolase
CN 1,4-α-D-Glucanase
CN 1,4-α-Glucanase
CN Amano AD 1
CN **Amylase AD**
CN **Amylase THC 250**
CN Amylogal CS
CN Amylolisin 5
CN Amylopsin

CN Amylosubtilin
CN AP subtilin
CN Aquazym 120L
CN Aquazyme 240
CN Aquazyme 240L
CN AS 10
CN Bactosol TK
CN Ban
CN Ban (enzyme)
CN BAN 120L
CN BAN 240
CN Ban 480L
CN Beisol T 2090
CN **Bioamylase BAA**
CN Biobake 40000
CN Bioferm
CN Bioferm P
CN Bioprep TBS
CN Biotex GT
CN Biozyme A
CN Biozyme F
CN Brewers Amylique TS
CN Buclamase
CN Canalpha 1000P
CN Canalpha 600L
CN Canalpha 60P
CN Clarase
CN Denazyme SA 7
CN Desize 160
CN E.C. 3.2.1.1
CN Ekikakoso 6T
CN EMCEmaltex 1000
CN **Endoamylase**
CN FD Super
CN Fermizyme P 500
CN Fortizyme
CN **Fukutamylase**
CN Fungamil Super AX
CN Fungamyl
CN Fungamyl 2500BG
CN **G6-Amylase**
CN **Taka-amylase**
CN **Taka-amylase A**
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY
AR 9000-85-5, 152923-47-2, 152923-48-3, 152923-49-4
DR 9001-95-0, 9036-05-9, 9077-78-5, 135319-50-5, 106009-10-3, 70356-39-7, 144133-13-1
MF Unspecified
CI COM, MAN
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH, IPA, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Book; Conference; Dissertation; Journal; Patent; Preprint; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT

(Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
14685 REFERENCES IN FILE CA (1907 TO DATE)
219 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
14716 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:380681

REFERENCE 2: 140:376923

REFERENCE 3: 140:374457

REFERENCE 4: 140:374293

REFERENCE 5: 140:374225

REFERENCE 6: 140:374217

REFERENCE 7: 140:374211

REFERENCE 8: 140:374008

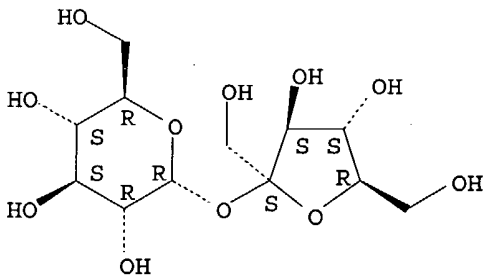
REFERENCE 9: 140:372022

REFERENCE 10: 140:371970

L91 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2004 ACS on STN
RN **57-50-1** REGISTRY
CN α-D-Glucopyranoside, β-D-fructofuranosyl (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Sucrose (8CI)**
OTHER NAMES:
CN **(+)-Sucrose**
CN β-D-Fructofuranosyl α-D-glucopyranoside
CN Amerfond
CN Beet sugar
CN Cane sugar
CN Confectioner's sugar
CN D-(+)-Saccharose
CN **D-(+)-Sucrose**
CN **D-Sucrose**
CN GNE 410
CN Granulated sugar
CN Manalox AS
CN Microse
CN NSC 406942
CN Rock candy
CN Saccharose
CN Saccharum
CN Sucralox

CN Sugar
CN White sugar
FS STEREOSEARCH
DR 635681-90-2, 12040-73-2, 8027-47-2, 8030-20-4, 131932-12-2, 64533-66-0, 104242-10-6, 50857-68-6, 51909-69-4, 65545-99-5, 75398-84-4, 76056-38-7, 78654-77-0, 146054-35-5, 146187-04-4, 151756-02-4, 80165-03-3, 85456-51-5, 86101-30-6, 87430-66-8, 92004-84-7, 29253-78-9, 29764-06-5, 30027-72-6, 47167-52-2, 47185-09-1, 47257-91-0, 100405-08-1, 220376-22-7
MF **C12 H22 O11**
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, PS, RTECS*, SPECINFO, TOXCENTER, TULSA, USAN, USPAT2, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Book; Conference; Dissertation; Journal; Patent; Preprint; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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3831 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
65343 REFERENCES IN FILE CAPLUS (1907 TO DATE)
5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:385196

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REFERENCE   2:  140:382981

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REFERENCE   9:  140:380628

REFERENCE  10:  140:380593


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L2             8 S C12H22O11/MF AND SUCROSE
L3             8 S L1,L2
               E AMYLASE/CN
L4             1 S E3
               E AMYLASE
L5          3827 S E3 NOT L4
L6            13 S L5 AND SALIVA?
L7          3814 S L5 NOT L6

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               E BARRET/CT
               E E8+ALL
               E E2+ALL
L8           330 S ESOPHAGUS?/CT (L) BARRETT?
L9           154 S ESOPHAGUS, DISEASE?/CT (L) BARRETT?
L10          433 S ?ESOPHAG?(L)?BARRET?
L11          433 S L8-L10
L12        19051 S L4
L13           14 S L6
L14        35080 S L7
L15            0 S L11 AND L12
L16            0 S L11 AND L13
L17            0 S L11 AND L14
L18            0 S L11 AND ?AMYLASE?
L19        65497 S L3
L20            0 S L11 AND L19
L21            0 S L11 AND SUCROSE
L22           66 S ?ESOPHAG? AND L12-L14
L23           71 S ?ESOPHAG? AND ?AMYLASE?
L24          612 S ?ESOPHAG? AND 19
L25           92 S ?ESOPHAG? AND SUCROSE
L26          780 S L22-L25
               E ESOPHAGUS/CT
L27         8057 S E3-E29
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                E E8+ALL
L28          4621 S E8,E7+NT
                E E31
L29          1728 S E30-E40
L30            30 S L27-L29 AND L12-L14
L31            26 S L27-L29 AND ?AMYLASE?
L32            15 S L27-L29 AND L19
L33            49 S L27-L29 AND SUCROSE
L34           783 S L26,L30-L33
                E E36+ALL
L35          3590 S E21,E20+NT
L36             9 S L35 AND L12-L14,L19
L37             4 S L35 AND ?AMYLASE?
L38             8 S L35 AND SUCROSE
L39           783 S L34,L36-L38
L40            26 S L39 AND BARRET?
L41            26 S L40 AND L8-L40
L42             0 S L41 AND ?AMYLASE?
L43             0 S L41 AND SUCROSE
L44             0 S L41 AND JUNCTION
L45            11 S L41 AND ?MARKER?
L46             2 S US20010053534/PN OR (WO2001-US15257 OR US2000-203217#)/AP,PRN
                E MULLIN J/AU
L47           395 S E3-E22
                E THORTON J/AU
L48             1 S E4
L49             1 S L46 AND L47,L48
L50             2 S L47,L48 AND L8-L45
L51             1 S L50 NOT 75/SC
L52             3 S L47,L48 AND (?AMYLASE? OR SUCROSE)
L53             1 S L52 AND 9/SC
L54             1 S L51,L53
L55          4297 S (L4 OR L5 OR L6 OR L3)(L)ANT/RL
L56          6081 S (L4 OR L5 OR L6 OR L3)(L)ANST/RL
L57            83 S (L4 OR L5 OR L6 OR L3)(L)DGN/RL
L58             3 S L55-L57 AND L27-L29,L35
L59             2 S L58 NOT STURGEON
                E GASTROINTESTINAL/CT
                E E31+ALL
                E E2+ALL
L60           422 S L55-L57 AND E3+NT
                E E88+ALL
L61           201 S L55-L57 AND E4,E3+NT
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L63             2 S L62 AND ?ESOPH?
L64            14 S L60,L61 AND TUMOR MARKERS+OLD,NT,PFT/CT
L65            14 S L63,L64
L66             6 S L64 AND SCREEN?
L67             2 S L57 AND L58,L59
L68            40 S L57 AND (BIOCHEM?(L)METHOD?)/SC,SX
L69           133 S L55-L57 AND (?NEOPLAS? OR ?CANCER? OR ?CARCIN? OR ?TUMOR? OR
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L71             0 S L70 AND L27-L29,L35
L72            31 S L70 AND (?DIGEST? OR ?GASTRO? OR ?GASTRI? OR ?INTESTIN?)
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L73             4 S L72 AND E1-E12
L74            52 S L70 NOT L72
                SEL DN AN 49 50 51
L75             3 S L74 AND E13-E21
L76             8 S L73,L75,L54 AND L8-L75
L77             8 S L76 AND (?AMYLASE? OR ?SUCROSE? OR ?SACCHARIDE? OR ?SUGAR?)
L78           816 S (L12-L14,L19 OR ?AMYLASE? OR ?SUCROSE?) AND ?LEAK?
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     CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS,
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                SEA TIGHT JUNCTION(25W)ESOPHAGUS
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     FILE 'EMBASE' ENTERED AT 08:37:41 ON 03 JUN 2004
L2           1 S TIGHT JUNCTION(25W)ESOPHAGUS

     INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
     BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA,
     CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS,
     DDFB, DDFU, DGENE, DRUGB, DRUGMONOG2, ...' ENTERED AT 08:38:32 ON 03 JUN
     2004
                SEA ESOPHAGUS(25W)LEAK?
               ---------
               1    FILE AQUASCI
               1    FILE BIOBUSINESS
              31    FILE BIOSIS
               1    FILE BIOTECHNO
              79    FILE CANCERLIT
               8    FILE CAPLUS
               1    FILE DISSABS
               1    FILE DDFB
               2    FILE DDFU
               1    FILE DRUGB
               5    FILE DRUGU
               1    FILE EMBAL
             127    FILE EMBASE
               8    FILE ESBIOBASE
               1    FILE FEDRIP
               1    FILE HEALSAFE
               1    FILE IFIPAT
              33    FILE JICST-EPLUS
               3    FILE LIFESCI
              46    FILE MEDLINE
               1    FILE OCEAN
              28    FILE PASCAL
               3    FILE PROMT
              46    FILE SCISEARCH
               4    FILE TOXCENTER
              38    FILE USPATFULL
               2    FILE USPAT2
               5    FILE WPIDS
               5    FILE WPINDEX
L3              QUE ESOPHAGUS(25W) LEAK?
               ---------
                SEA L3 AND BARRETT
               ---------
               1    FILE BIOSIS
               1    FILE DRUGU
               1    FILE EMBASE
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                4    FILE USPATFULL
L4               QUE L3 AND BARRETT
                ---------

     FILE 'USPATFULL, BIOSIS, DRUGU, EMBASE' ENTERED AT 08:39:47 ON 03 JUN 2004
L5            7 S L3 AND BARRETT
L6            7 DUP REM L5 (0 DUPLICATES REMOVED)

     INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
     BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA,
     CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS,
     DDFB, DDFU, DGENE, DRUGB, DRUGMONOG2, ...' ENTERED AT 08:42:22 ON 03 JUN
     2004
               SEA ESOPHAGUS(25W)AMYLASE AND LEAK?
               ---------
L7             QUE ESOPHAGUS(25W) AMYLASE AND LEAK?
               ---------
               SEA ESOPHAGUS(25W)AMYLASE AND PERM?
               ---------
L8             QUE ESOPHAGUS(25W) AMYLASE AND PERM?
               ---------
               SEA ESOPH?(25W)AMYLASE AND PERM?
               ---------
L9             QUE ESOPH?(25W) AMYLASE AND PERM?
               ---------
               SEA BARRETT(25W)DIAG? AND SALIVARY
               ---------
               1    FILE BIOSIS
               2    FILE USPATFULL
L10            QUE BARRETT(25W) DIAG? AND SALIVARY
               ---------

     FILE 'USPATFULL, BIOSIS' ENTERED AT 08:46:57 ON 03 JUN 2004
L11           3 S BARRETT(25W)DIAG? AND SALIVARY
L12           3 DUP REM L11 (0 DUPLICATES REMOVED)

     INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
     BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA,
     CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS,
     DDFB, DDFU, DGENE, DRUGB, DRUGMONOG2, ...' ENTERED AT 08:48:52 ON 03 JUN
     2004
               SEA LEAKAGE(25W)SUCROSE AND ESOPH?
               ---------
               1    FILE BIOSIS
               2    FILE USPATFULL
L13            QUE LEAKAGE(25W) SUCROSE AND ESOPH?
               ---------

     FILE 'USPATFULL, BIOSIS' ENTERED AT 08:49:35 ON 03 JUN 2004
L14           3 S LEAKAGE(25W)SUCROSE AND ESOPH?

     INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
     BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA,
     CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS,
     DDFB, DDFU, DGENE, DRUGB, DRUGMONOG2, ...' ENTERED AT 08:51:42 ON 03 JUN
     2004
               SEA BARRETT'S' ESOPHAGUS AND SALIVARY AMYLASE
               ---------
L15            QUE BARRETT'S' ESOPHAGUS AND SALIVARY AMYLASE
               ---------

     INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
     BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA,
     CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS,
```

DDFB, DDFU, DGENE, DRUGB, DRUGMONOG2, ...' ENTERED AT 08:53:55 ON 03 JUN 2004

SEA LEAK?(25W)SALIVARY AMYLASE

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1 FILE USPATFULL

L16 QUE LEAK?(25W) SALIVARY AMYLASE

FILE 'USPATFULL' ENTERED AT 08:54:42 ON 03 JUN 2004

L17 1 S LEAK?(25W)SALIVARY AMYLASE

=>

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L79         1148 S (L12-L14,L19 OR ?AMYLASE? OR ?SUCROSE?) AND ?JUNCTION?
L80         3704 S (L12-L14,L19 OR ?AMYLASE? OR ?SUCROSE?) AND ?PERMEAB?
L81          223 S L78-L80 AND ?EPITHEL?
L82          208 S L78-L80 AND (?NEOPLAS? OR ?CANCER? OR ?CARCIN? OR ?TUMOR? OR
L83           13 S L81 AND L82
L84            3 S L83 AND STOMACH
                 SEL DN AN L84
                 SEL DN AN L84 3
L85            1 S L84 AND E31-E33
L86            8 S L77,L85
L87            2 S L12-L14,L19 AND ?BARRET?
L88           20 S (?AMYLASE? OR ?SUCROSE? OR ?SACCHARID? OR ?SUGAR? OR ?CARBOHY
                 SEL DN AN L88 12
L89            1 S L88 AND E34-E36
L90            9 S L86,L89
                 SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 14:03:13 ON 03 JUN 2004
L91            4 S E37-E40 AND L1-L7

     FILE 'REGISTRY' ENTERED AT 14:03:53 ON 03 JUN 2004

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 14:04:00 ON 03 JUN 2004
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FILE COVERS 1907 - 3 Jun 2004  VOL 140 ISS 23
FILE LAST UPDATED: 2 Jun 2004  (20040602/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


=> d l90 all tot

L90  ANSWER 1 OF 9  HCAPLUS  COPYRIGHT 2004 ACS on STN
AN   2001:924284  HCAPLUS
DN   136:34326
ED   Entered STN:  21 Dec 2001
TI   Early diagnosis of cancerous and precancerous
     conditions by leakage of signature peptides and carbohydrates into the
     bloodstream
IN   Mullin, James; Thorton, James
PA   USA
SO   U.S. Pat. Appl. Publ., 6 pp.
     CODEN: USXXCO
DT   Patent
LA   English
IC   ICM  G01N033-574
     ICS  C12Q001-40; C12Q001-37; G01N033-48
```

NCL 435007230
CC **9-16 (Biochemical Methods)**
Section cross-reference(s): 14
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 2001053534	A1	20011220	US 2001-853427	20010510	<--
	WO 2003050500	A1	20030619	WO 2001-US15257	20010510	<--

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 2000-203271P P 20000510
AB The invention concerns the early diagnosis of **cancerous** or **precancerous** conditions in the **gastrointestinal** tract by detection of a backleak of signature proteins or carbohydrates in a biol. sample obtained from the **gastrointestinal** tract.
ST diagnosis **cancer** blood peptide carbohydrate pepsin **amylase** mannitol **sucrose**
IT Blood analysis
Diagnosis
Digestive tract
Immunoassay
Mammalia
(early diagnosis of **cancerous** and **precancerous** conditions by leakage of signature peptides and carbohydrates into bloodstream)
IT Carbohydrates, analysis
Peptides, analysis
Proteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(early diagnosis of **cancerous** and **precancerous** conditions by leakage of signature peptides and carbohydrates into bloodstream)
IT Bioassay
(enzyme; early diagnosis of **cancerous** and **precancerous** conditions by leakage of signature peptides and carbohydrates into bloodstream)
IT Proteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(trefoil; early diagnosis of **cancerous** and **precancerous** conditions by leakage of signature peptides and carbohydrates into bloodstream)
IT **57-50-1, Sucrose**, analysis 69-65-8, Mannitol
9001-75-6, Pepsin
RL: **ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study)**; BIOL (Biological study); USES (Uses)
(early diagnosis of **cancerous** and **precancerous** conditions by leakage of signature peptides and carbohydrates into bloodstream)
IT **9000-92-4, Amylase**
RL: **ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study)**; BIOL (Biological study); USES (Uses)
(salivary; early diagnosis of **cancerous** and **precancerous** conditions by leakage of signature peptides and carbohydrates into bloodstream)

L90 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **1999:787752** HCAPLUS
DN **132:32922**
ED Entered STN: 14 Dec 1999
TI Diagnostic method of stomach **cancer**
IN Mizuochi, Tsugio; Konishi, Toshio
PA Fujirebio, Inc., Japan; Tokai University
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G01N033-68
CC **9-7 (Biochemical Methods)**
Section cross-reference(s): 14
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11344495	A2	19991214	JP 1998-167809	19980602
	JP 3490893	B2	20040126		
PRAI	JP 1998-167809		19980602		

AB A method for stomach **cancer** diagnosis by analyzing **gastric** juice is disclosed. The method is simple, low cost, more accurate than the traditional x-ray anal. method and easier for patients to handle. The method is also useful for fast screening.
ST stomach **cancer** diagnosis **gastric** juice analysis; electrophoresis stomach **cancer** diagnosis **gastric** juice analysis
IT Diagnosis
(**cancer**; diagnostic method of stomach **cancer**)
IT **Gastric juice**
Stomach, neoplasm
pH
(diagnostic method of stomach **cancer**)
IT Proteins, general, analysis
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(diagnostic method of stomach **cancer**)
IT **Stomach, disease**
(**gastritis**; diagnostic method of stomach **cancer**)
IT Albumins, analysis
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(serum; diagnostic method of stomach **cancer**)
IT **9000-90-2**, α- **Amylase** 9001-10-9, Pepsinogen
9012-71-9, Pepsin C
RL: **ANT (Analyte)**; THU (Therapeutic use); **ANST (Analytical study)**; BIOL (Biological study); USES (Uses)
(diagnostic method of stomach **cancer**)

L90 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **1999:311326** HCAPLUS
DN **130:322692**
ED Entered STN: 21 May 1999
TI **Sucrose** detection by enzyme-linked immunosorbent assay
IN Borgford, Thor Jon; Racher, Kathleen Iris; Braun, Curtis Archie John
PA De Novo Enzyme Corporation, Can.
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C12Q001-48
ICS C12Q001-54; G01N033-66

CC **9-10 (Biochemical Methods)**

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9923247	A1	19990514	WO 1998-CA1017	19981102
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 5972631	A	19991026	US 1997-962723	19971103
	CA 2307906	AA	19990514	CA 1998-2307906	19981102
	AU 9897325	A1	19990524	AU 1998-97325	19981102
	EP 1029075	A1	20000823	EP 1998-951142	19981102
	EP 1029075	B1	20040303		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2001522035	T2	20011113	JP 2000-519102	19981102
PRAI	US 1997-962723	A	19971103		
	WO 1998-CA1017	W	19981102		

AB A method is described for the rapid, sensitive and accurate determination of **sucrose** in biol. fluids. A substrate is pre-coated with a glucose or fructose polymer (dextran, amylose, levan) and a transglycosidase enzyme (dextransucrase, amylosucrase, levansucrase). When the coated substrate is incubated with biol. fluids containing concns. of **sucrose** , the transglycosidase enzyme transfers monomers of glucose or fructose from the **sucrose** to the glucose or fructose polymer. The dimensions of the polymer are increased in proportion to the **sucrose** concentration of the samples. Newly formed polymer is subsequently quantitated in an immunoassay which employs either a combination of a carbohydrate-binding protein (which may be an antibody) and a conjugate of a secondary antibody and a marker enzyme, or a conjugate of a carbohydrate-binding protein and a marker enzyme. The assay is particularly useful in a non-invasive diagnostic test for **gastric** damage.

ST **sucrose** detection ELISA glucose fructose polymer

IT Immunoglobulins
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(G; **sucrose** detection by ELISA)

IT Proteins, specific or class
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(carbohydrate-binding; **sucrose** detection by ELISA)

IT Immunoassay
(enzyme-linked immunosorbent assay; **sucrose** detection by ELISA)

IT Ascitic fluid
Body fluid
Hybridoma
Stomach, disease
Streptococcus sanguinis
(**sucrose** detection by ELISA)

IT Antibodies
Enzymes, uses
Polymers, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(**sucrose** detection by ELISA)

IT 50-99-7, Glucose, uses 57-48-7, Fructose, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(polymer; **sucrose** detection by ELISA)

IT **57-50-1**, **Sucrose**, analysis

RL: **ANT (Analyte)**; **ANST (Analytical study)**
(**sucrose** detection by ELISA)
IT 7722-84-1, Hydrogen peroxide, uses 9003-99-0, Peroxidase 9004-54-0, Dextran, uses 9005-82-7, Amylose 9013-95-0, Levan 9030-17-5, Levansucrase 9032-11-5, Amylosucrase 9032-14-8, Dextransucrase 25265-76-3, Phenylenediamine
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(**sucrose** detection by ELISA)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Toshio, M; US 4557927 A 1985 HCAPLUS
(2) Univ Queensland; EP 0142230 A 1985 HCAPLUS

L90 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **1998:792844** HCAPLUS
DN **130:180945**
ED Entered STN: 18 Dec 1998
TI **Sucrose permeability** as a means of detecting diseases of the upper **digestive** tract
AU Kawabata, Hidehiro; Meddings, Jon B.; Uchida, Yoshihito; Matsuda, Kazuya; Sasahara, Katsuyuki; Nishioka, Mikio
CS Third Department of Internal Medicine, Kagawa Medical School, Kagawa, Japan
SO Journal of Gastroenterology and Hepatology (1998), 13(10), 1002-1006
CODEN: JGHEEO; ISSN: 0815-9319
PB Blackwell Science Asia Pty Ltd.
DT Journal
LA English
CC 14-7 (Mammalian Pathological Biochemistry)
Section cross-reference(s): **9**
AB The healthy **gastric epithelium** will not allow easy permeation of a **disaccharide**-sized mol. such as **sucrose**. However, during **gastric** damage, intact **sucrose** can pass the **gastric epithelium** and ultimately appear in the urine. The authors examined the relation between total urinary **sucrose** excretion and various diseases. The authors used 149 patients (105 had upper **gastrointestinal** disease, 12 had **gastric cancer** and 32 were normal). Subjects were given a solution containing 100 g **sucrose** in 450 c.c. water. All urine was collected for 7.5 h. The urinary **sucrose** concentration was determined by anion exchange high-performance liquid chromatog. Total urinary **sucrose** excretion was significantly higher in patients with **gastric** ulcer and those with **gastric cancer** than in endoscopically normal controls. In the 34 patients with **gastric** ulcer, the total **sucrose** excretion was closely correlated with ulcer size. Ulcer location did not affect urinary **sucrose** excretion. A strong correlation was also observed between **sucrose** excretion and lesion size in the 12 patients with **gastric cancer.** The **sucrose permeability** test may be a relatively sensitive method to detect **gastric** disease.
ST **sucrose** excretion **digestive** tract disease
IT **Stomach, disease**
(ulcer; urinary excretion of **sucrose** as marker of human upper **gastrointestinal** disease)
IT Biomarkers (biological responses)
Stomach, neoplasm
Urine
(urinary excretion of **sucrose** as marker of human upper **gastrointestinal** disease)
IT **57-50-1, Sucrose**, biological studies
RL: **ANT (Analyte)**; THU (Therapeutic use); **ANST (Analytical study)**; BIOL (Biological study); USES (Uses)

(urinary excretion of **sucrose** as marker of human upper **gastrointestinal** disease)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Borrmann, R; Handbuch der Speziellen Pathologischen Anatomie und Histologie 1926, V4
(2) Dawson, D; Clin Sci 1988, V74, P427 MEDLINE
(3) Fisher, R; Cancer 1965, V18, P1278
(4) Meddings, J; Gastroenterology 1993, V104, P1619 HCAPLUS
(5) Murakami, T; Gann Monograph on Cancer Research 1971, VII
(6) Murphy, M; Arch Dis Child 1989, V64, P321 MEDLINE
(7) Nishi, N; Cellular Devel Biol 1988, V24, P778 HCAPLUS
(8) Sakita, T; Jpn J Clin Med 1964, V22, P1945
(9) Sanderson, I; Gut 1987, V28, P1073 MEDLINE
(10) Sutherland, L; Lancet 1994, V343, P998 MEDLINE
(11) Ukabam, S; Digestion 1983, V27, P70 MEDLINE
(12) van Elburg, R; Scand J Gastroenterol 1992, V194, P19 MEDLINE

L90 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN

AN **1988:53626** HCAPLUS

DN **108:53626**

ED Entered STN: 20 Feb 1988

TI Glycoconjugate expression in normal, metaplastic, and neoplastic human upper gastrointestinal mucosa

AU Shimamoto, Chikao; Weinstein, Wilfred M.; Boland, C. Richard

CS Sch. Med., Univ. Michigan, Ann Arbor, MI, 48105, USA

SO Journal of Clinical Investigation (1987), 80(6), 1670-8
CODEN: JCINAO; ISSN: 0021-9738

DT Journal

LA English

CC 14-1 (Mammalian Pathological Biochemistry)

AB Glycoconjugate structure in upper gastrointestinal epithelium was studied using 5 lectins to determine the relation between aberrant differentiation and glycoconjugate expression. Specimens of normal esophagus, stomach, and duodenum were examined and compared with specimens of columnar metaplasia in the esophagus (**Barrett**'s esophagus) and specimens of adenocarcinoma of the esophagus and stomach. Specific terminal glycoconjugate structures were found for the esophagus, stomach, and duodenum. Minor differences were found between the antral and fundic gland mucosae, reflecting their resp. cell populations. In biopsies of **Barrett**'s esophagus, gastric-type columnar metaplasia expressed glycoconjugates indistinguishable from those in the normal stomach. In specialized-type columnar metaplasia, a more restricted expression of glycoconjugates was seen resembling the normal duodenum. The presence of low grade dysplasia in **Barrett**'s esophagus associated with adenocarcinoma had no impact on glycoconjugate expression. However, a distinctive difference in glycosylation was seen in high grade dysplasia of the columnar-lined esophagus and in adenocarcinoma of the esophagus and stomach. **Barrett**'s esophagus is a morphol. mosaic in which the glycoconjugate expression resembles that seen in the normal stomach and duodenum. However, in high grade dysplasia and carcinoma, variable deletion of glycoconjugate expression can be found.

ST glycoconjugate upper gastrointestinal mucosa neoplasia; **Barrett** esophagus glycoconjugate

IT Carcinoma
(glycoconjugates of, of esophagus and stomach of human)

IT Stomach, composition
(glycoconjugates of, of humans)

IT **Carbohydrates** and **Sugars**, biological studies
Sialic acids
RL: BIOL (Biological study)
(of upper gastrointestinal mucosa of humans, metaplasia and neoplasia effect on)

IT Stomach, neoplasm
(carcinoma, glycoconjugates of, of humans)
IT Esophagus
(disease, **Barrett**'s syndrome, glycoconjugates of tissue in, in humans)
IT Intestine, composition
(duodenum, glycoconjugates of, of humans)
IT Esophagus
(neoplasm, carcinoma, glycoconjugates of, of humans)
IT 1811-31-0 3554-90-3 6696-41-9, α-L-Fucose 7512-17-6
RL: BIOL (Biological study)
(of upper gastrointestinal mucosa of humans, metaplasia and neoplasia effect on)

L90 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **1978:59796** HCAPLUS
DN **88:59796**
ED Entered STN: 12 May 1984
TI Laboratory diagnosis of pancreas diseases
AU Naito, Seiji
CS Inst. Casualty Cent., Juntendo Univ., Tokyo, Japan
SO Igaku no Ayumi (1977), 103(5), 383-7
CODEN: IGAYAY; ISSN: 0039-2359
DT Journal; General Review
LA Japanese
CC **9-0** (**Biochemical Methods**)
Section cross-reference(s): 14, 7
AB A review with 11 refs. Recent progress in the evaluation of serum **amylase** isoenzyme patterns, the pancreozymin-secretin stimulation test for pancreatic exocrine function, and phys. methods (ultrasonic, computerized tomog.) for the diagnosis of pancreatic **cancer** and acute and chronic pancreatitis are covered.
ST review pancreas disease diagnosis; pancreatitis diagnosis review; **cancer** pancreas diagnosis review; **amylase** isoenzyme pancreas disease review
IT Blood analysis
(**amylase** isoenzymes determination in, pancreatic disease diagnosis in relation to)
IT Sound and Ultrasound
(in pancreatic disease diagnosis)
IT **Cancer**
(of pancreas, diagnosis of, methods in)
IT **Pancreas, neoplasm**
(**cancer**, diagnosis of, methods in)
IT Radiography
(laminog., in pancreatic disease diagnosis)
IT **Pancreas, disease or disorder**
(**pancreatitis**, diagnosis of, methods in)
IT **9000-92-4**
RL: **ANST (Analytical study)**
(isoenzymes, of blood serum, in pancreatic disease diagnosis)
IT 1393-25-5
RL: ANST (Analytical study)
(pancreozymin and, stimulation test, pancreatic function in relation to)
IT 9011-97-6
RL: ANST (Analytical study)
(secretin and, stimulation test, pancreatic function in relation to)

L90 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **1976:147112** HCAPLUS
DN **84:147112**
ED Entered STN: 12 May 1984

TI Salivary **amylase** in duodenal aspirates
AU Skude, G.; Ihse, Ingemar
CS Dep. Clin. Chem., Univ. Lund, Lund, Swed.
SO Scandinavian Journal of Gastroenterology (1976), 11(1), 17-20
CODEN: SJGRA4; ISSN: 0036-5521
DT Journal
LA English
CC **9-3** (**Biochemical Methods**)
Section cross-reference(s): 14
AB Salivary and pancreatic **isoamylases** in duodenal aspirates obtained during assessment of pancreatic function after test meal stimulation were separated by agarose gel electrophoresis. Salivary **amylase** was found to be a constituent of the duodenal aspirates in >75% of the tests. The mean relative contribution of salivary **amylase** to the total **amylase** activity of the aspirates varied from .apprx.15% in normals to .apprx.40% in patients with chronic pancreatitis and pancreatic **carcinoma.** The amount of salivary **amylase** varied widely not only between the individuals but also within the samples of the same test series. Specific determination of the pancreatic isoaylases instead of determination of the total **amylase** increased the discrimination between normals and patients with pancreatic dysfunction.
ST salivary **amylase** duodenum pancreas function
IT **Salivary gland**
(**amylase** of, detection in duodenal aspirates, pancreas function in relation to)
IT **Intestinal** content
(duodenal, salivary and pancreatic **amylases** of, pancreas function in relation to)
IT **Pancreas**
(function test, **amylase** determination in)
IT **Carcinoma**
(pancreatic, salivary gland **amylase** determination in relation to)
IT **9000-92-4**
RL: **ANST (Analytical study)**
(salivary and pancreatic, of duodenal aspirates, pancreas function in relation to)

L90 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **1975:135229** HCAPLUS
DN **82:135229**
ED Entered STN: 12 May 1984
TI Diagnosis of pancreatic **carcinoma**
AU Hatta, Y.; Taguchi, S.; Sakamoto, N.; Suzawa, S.; Koyama, M.; Kato, K.; Miyazaki, H.
CS Med. Dep., Showa Univ., Tokyo, Japan
SO Lancet (1975), 1(7897), 46
CODEN: LANCAO; ISSN: 0140-6736
DT Journal
LA English
CC **9-6** (**Biochemical Methods**)
Section cross-reference(s): 7, 14
AB A method was described for the diagnosis of pancreatic **carcinoma** that depended on detecting an anomaly in the pancreatic **amylase** isoenzyme pattern in the disease. Pancreatic juice, obtained by pancreozyminsecretin stimulation, was subjected to polyacrylamide gel electrophoresis at pH 8.3. The gel was then soaked in 1.5% agar containing fluorescent dye associated with **oligosaccharide** at 37°. The gel was then examined by fluorescent densitometry (excitation wavelength 345 nm, emission 435 nm). Isoenzyme peaks in the densitogram were compared. Designating them P1-P5 from the cathodic side to the anodic side, it was found that the sum of P1 and P2 was 33-59% of the area under the curve in 7 healthy volunteers, 75-100% in 8 patients with pancreatic

carcinoma, and 2-92% in 16 patients with chronic pancreatitis.
ST pancreas **carcinoma** diagnosis **amylase** isoenzyme
IT **Pancreas, disease or disorder**
(**carcinoma**, diagnosis of, **amylase** isoenzyme patterns in relation to)
IT **Carcinoma**
(pancreatic, diagnosis of, **amylase** isoenzyme patterns in relation to)
IT **9000-92-4**
RL: **ANST (Analytical study)**
(isoenzymes, pancreatic **carcinoma** diagnosis in relation to)

L90 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2004 ACS on STN
AN **1972:110012** HCAPLUS
DN **76:110012**
ED Entered STN: 12 May 1984
TI Critical analysis of the blood glucose-**amylase** test based upon quantitative parameters collected in 55 subjects
AU Chariot, J.; Gouin, B.; Da la Tour, J.; Debray, Ch.
CS Serv. Gastro-Enterol. A, Hop. Bichat, Paris, Fr.
SO Biologie et Gastro-Enterologie (1971), 3, 199-209
CODEN: BGENAC; ISSN: 0006-3258
DT Journal
LA French
CC **9 (Biochemical Methods)**
Section cross-reference(s): 14
AB Comparison of the blood glucose-**amylase** test and simple determination of blood **amylase** and lipase showed no diagnostic advantage for the more complex method. Initial concentration, maximum variation, and mean variation per hr of blood glucose, **amylase**, and lipase were determined in 55 pancreatic and nonpancreatic subjects, following oral glucose administration (50-g dose). The only significant parameters were initial levels of blood **amylase** and lipase; 495 IU **amylase**/l. and 2.77 conventional units (CU) lipase/ml for suspected pancreatitis, as compared to 172 IU **amylase**/l. and 1.18 CU lipase/ml for pancreatic **cancer.** Lack of reproducibility for other parameters and a spontaneous variation in **amylase** blood levels of ±36 Somogyi units were cited as primary reasons for nonreliability of the blood glucose-**amylase** test. The previously assumed stimulant effect of oral glucose on external pancreatic excretion was brought into question.
ST blood glucose **amylase** test
IT Blood **sugar**
(after glucose loading in pancreatic disorder, enzymes of blood in relation to)
IT **Pancreas, disease or disorder**
(**amylase** and lipase of blood after glucose loading in diagnosis of)
IT Blood
(enzymes of, in pancreatic disorder diagnosis)
IT 50-99-7, biological studies
RL: BIOL (Biological study)
(-tolerence test in pancreatic disorder diagnosis, **amylase** and lipase in blood in relation to)
IT 9001-62-1
RL: ANST (Analytical study)
(of blood, in pancreatic disorder after glucose loading)
IT **9032-08-0**
RL: **ANST (Analytical study)**
(of blood, in pancreatic disorder, **amylase** and lipase determination in relation to)

=> fil biosis
FILE 'BIOSIS' ENTERED AT 14:11:28 ON 03 JUN 2004

FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 2 June 2004 (20040602/ED)

FILE RELOADED: 19 October 2003.

=> d all tot

L104 ANSWER 1 OF 2 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2003:583085 BIOSIS
DN PREV200300572894
TI **BARRETT**'S EPITHELIUM AS A LOW RESISTANCE SHUNT ACROSS THE **ESOPHAGEAL** BARRIER. .
AU Rendon-Huerta, Erika [Reprint Author]; Valenzano, Mary C.; Trembeth, Susan; Hameed, Burhan; Kothari, Rupal; Mercogliano, Giancarlo; Meddings, Jonathan B.; Thornton, James J.; **Mullin, James M.**
CS Wynnewood, PA, USA
SO Digestive Disease Week **Abstracts** and Itinerary Planner, (2003) Vol. 2003, pp. **Abstract** No. T924. e-file.
Meeting Info.: Digestive Disease 2003. FL, Orlando, USA. May 17-22, 2003. American Association for the Study of Liver Diseases; American Gastroenterological Association; American Society for Gastrointestinal Endoscopy; Society for Surgery of the Alimentary Tract.
DT **Conference; (Meeting)**
Conference; (Meeting Poster)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 10 Dec 2003
Last Updated on STN: 10 Dec 2003
AB The permeability of an endogenous and exogenous marker across the **gastroesophageal** tract of control patients vs patients with prediagnosed **Barrett**'s metaplasia was evaluated. The activity of the salivary isoform of **amylase** was evaluated in patients' serum with blood samples being drawn at the time of upper endoscopy. In addition, two weeks post endoscopy, patients orally consumed a solution of 100 gms of **sucrose** in 200 cc of water at bedtime, followed by collection of overnight urine output. **Sucrose** amount in urine, a measure of **sucrose** diffusion across the upper GI tract into the bloodstream, was determined by HPLC. Although salivary **amylase** (mw 55,000) levels in the blood of control and **Barrett**'s patients were not distinguishable, the **Barrett**'s **Esophagus** patients showed almost 4-fold increased **leakage** of **sucrose** (mw 342) out of the lumen of the upper GI tract. For 20 control patients, the mean urine **sucrose** was 65 mg +/- 4 mg (SEM). For 8 **Barrett**'s patients, the mean urine **sucrose** was 160 mg +/- 37 mg (SEM) ($P < 0.02$, Student's t test). Mucosal biopsies of normal **esophageal** epithelium from both **Barrett**'s patients and control patients, and of **Barrett**'s epithelium itself, were evaluated for expression levels of occludin, claudin-1 and claudin-2 by Western immunoblot. Occludin was found in all three groups, and showed no difference in expression level (on a per mg total protein basis) among the three groups. Claudin-1 however was sharply lower in **Barrett**'s epithelium than in normal squamous epithelium. **Barrett**'s epithelium showed only 50% of the level of claudin-1 seen in normal squamous epithelium. Claudin-2 was consistently absent in all normal squamous epithelial biopsies. However

two of the eight patients' **Barrett**'s epithelium biopsies manifested readily detectable levels of claudin-2. Induction of claudin-2 and sharply elevated **leakage** of **sucrose** might indicate relative tight junctional **leakiness** in **Barrett**'s epithelium. They may also be risk factors for future development of **esophageal** adenocarcinoma. (Work supported by a grant from the John S. Sharpe Fndn.)..

CC **General biology - Symposia, transactions and proceedings 00520**
Cytology - Animal 02506
Cytology - Human 02508
Biochemistry studies - Carbohydrates 10068
Enzymes - General and comparative studies: coenzymes 10802
Pathology - Diagnostic 12504
Digestive system - Physiology and biochemistry 14004
Digestive system - Pathology 14006
Urinary system - Physiology and biochemistry 15504
Dental biology - Physiology and biochemistry 19004
Development and Embryology - Pathology 25503

IT Major Concepts
Gastroenterology (Human Medicine, Medical Sciences)

IT Parts, Structures, & Systems of Organisms
esophageal epithelium: digestive system; saliva: dental and oral system; urine: excretory system

IT Diseases
Barrett's **esophagus**: congenital disease, digestive system disease, diagnosis
Barrett Esophagus (MeSH)

IT Chemicals & Biochemicals
amylase; claudin-1: expression; claudin-2: expression; occludin: expression; **sucrose**

IT Methods & Equipment
upper endoscopy: clinical techniques, therapeutic and prophylactic techniques

ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human (common): patient
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

RN **9000-92-4 (amylase)**
57-50-1 (sucrose)

L104 ANSWER 2 OF 2 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2003:433357 BIOSIS
DN PREV200300433357
TI Comparison of three integral tight junction barrier proteins in **Barrett**'s epithelium versus normal **esophageal** epithelium.
AU Rendon-Huerta, Erika; Valenzano, Mary Carmen; **Mullin, James M.** [Reprint Author]; Trembeth, Susan E.; Kothari, Rupal; Hameed, Burhan; Mercogliano, Giancarlo; Thornton, James J.
CS Lankenau Institute for Medical Research, 100 Lancaster Avenue, Wynnewood, PA, 19096, USA
SO American Journal of Gastroenterology, (August 2003) Vol. 98, No. 8, pp. 1901-1903. print.
ISSN: 0002-9270 (ISSN print).
DT Letter
LA English
ED Entered STN: 17 Sep 2003
Last Updated on STN: 17 Sep 2003
CC Cytology - Animal 02506

Cytology - Human 02508
Genetics - Human 03508
Clinical biochemistry - General methods and applications 10006
Enzymes - General and comparative studies: coenzymes 10802
Pathology - Diagnostic 12504
Digestive system - Physiology and biochemistry 14004
Digestive system - Pathology 14006
Neoplasms - Diagnostic methods 24001
Neoplasms - Pathology, clinical aspects and systemic effects 24004
Development and Embryology - Pathology 25503

IT Major Concepts
Clinical Chemistry (Allied Medical Sciences); Gastroenterology (Human Medicine, Medical Sciences); Oncology (Human Medicine, Medical Sciences)

IT Parts, Structures, & Systems of Organisms
esophageal epithelium: digestive system, transepithelial permeability; **esophagus**: digestive system; stomach: digestive system

IT Diseases
Barrett's esophagus: congenital disease, digestive system disease, diagnosis
Barrett Esophagus (MeSH)

IT Diseases
Barrett's esophagus dysplasia: digestive system disease, neoplastic disease

IT Diseases
aneuploidy: genetic disease
Aneuploidy (MeSH)

IT Diseases
gastric epithelial dysplasia: digestive system disease, neoplastic disease

IT Diseases
gastroesophageal reflux disease: digestive system disease
Gastroesophageal Reflux (MeSH)

IT Chemicals & Biochemicals
claudin 1: band density, biomarker, integral tight junction barrier protein, expression, phosphorylation, regulation; claudin 2: band density, biomarker, integral tight junction barrier protein, expression, phosphorylation, regulation; claudin 3: band density, biomarker, integral tight junction barrier protein, expression, phosphorylation, regulation; claudin 4: band density, biomarker, integral tight junction barrier protein, expression, phosphorylation, regulation; claudin 7: band density, biomarker, integral tight junction barrier protein, expression, phosphorylation, regulation; claudin 9: band density, biomarker, integral tight junction barrier protein, expression, phosphorylation, regulation; occludin: band density, biomarker, integral tight junction barrier protein, expression, phosphorylation, regulation; protease: biomarker; protein phosphatase [EC 3.1.3.16]: biomarker

IT Methods & Equipment
Western immunoblot: genetic techniques, immunologic techniques, laboratory techniques; densitometry: laboratory techniques; endoscopic biopsy: clinical techniques, diagnostic techniques; upper endoscopy: clinical techniques, therapeutic and prophylactic techniques

IT Miscellaneous Descriptors
risk assessment

ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human (common): patient
Taxa Notes

Animals, Chordates, Humans, Mammals, Primates, Vertebrates
RN 9001-92-7 (protease)
9025-75-6Q (protein phosphatase)
79747-53-8Q (protein phosphatase)
149885-84-7Q (protein phosphatase)
375798-61-1Q (protein phosphatase)
9025-75-6 (protein phosphatase)
9025-75-6Q (EC 3.1.3.16)
79747-53-8Q (EC 3.1.3.16)
149885-84-7Q (EC 3.1.3.16)
375798-61-1Q (EC 3.1.3.16)
9025-75-6 (EC 3.1.3.16)

=> => fil cancer
FILE 'CANCERLIT' ENTERED AT 14:22:49 ON 03 JUN 2004

FILE COVERS 1963 TO 15 Nov 2002 (20021115/ED)

On July 28, 2002, CANCERLIT was reloaded. See HELP RLOAD for details.

CANCERLIT thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2002 vocabulary. Enter HELP THESAURUS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l123 all tot

L123 ANSWER 1 OF 2 CANCERLIT on STN
AN 2000382614 CANCERLIT
DN 20382614 PubMed ID: 10923077
TI Prevalence and pathogenesis of pancreatic acinar tissue at the gastroesophageal **junction** in children and young adults.
AU Popiolek D; Kahn E; Markowitz J; Daum F
CS Department of Laboratories, North Shore University Hospital, New York University School of Medicine, Manhasset 11030, USA.
SO ARCHIVES OF PATHOLOGY AND LABORATORY MEDICINE, (2000 Aug) 124 (8) 1165-7. Journal code: 7607091. ISSN: 0003-9985.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS MEDLINE; Abridged Index Medicus Journals; Priority Journals
OS MEDLINE 2000416956
EM 200008
ED Entered STN: 20001012
Last Updated on STN: 20001012
AB BACKGROUND: Pancreatic acinar tissue (PAT) at the gastroesophageal **junction** (GEJ) has been reported in 3% of adults with **Barrett** esophagus (BE) and in 24% of healthy subjects. The pathogenesis of this ectopic tissue is controversial. Both an acquired metaplastic process in the setting of BE and a congenital abnormality have been suggested in adults. OBJECTIVE: To clarify the origin of PAT at the GEJ. METHODS: We reviewed material obtained from the GEJ in 69 children and young adults. Each specimen was evaluated by 3 levels stained with hematoxylin-eosin for the presence of PAT, BE, esophagitis, and gastritis. Selected cases were also examined with immunohistochemical stains for lipase, trypsin, and **amylase.** RESULTS: In 16% of the study population, PAT was present at the GEJ and was not associated with BE. The prevalence of esophagitis and/or gastritis did not vary significantly between patients with and without PAT. CONCLUSIONS: Our data suggest that PAT at the GEJ develops independently of inflammation and is, therefore, likely to be congenital.

CT Check Tags: Female; Human; Male
Adolescence
Adult
Age Distribution
Amylases: ME, metabolism
Barrett Esophagus: EP, epidemiology
Barrett Esophagus: PA, pathology
Biopsy
Child
Child, Preschool
Choristoma: EP, epidemiology
Choristoma: ME, metabolism
*Choristoma: PA, pathology
Cohort Studies
Comorbidity
Esophageal Neoplasms: EP, epidemiology
Esophageal Neoplasms: ME, metabolism
***Esophageal Neoplasms: PA, pathology**
Esophagitis: EP, epidemiology
Esophagitis: PA, pathology
***Esophagogastric Junction: PA, pathology**
Gastritis: EP, epidemiology
Gastritis: PA, pathology
Infant
Lipase: ME, metabolism
*Pancreas
Prevalence
Trypsin: ME, metabolism
CN EC 3.1.1.3 (Lipase); EC 3.2.1.- (**Amylases**); EC 3.4.21.4 (Trypsin)

L123 ANSWER 2 OF 2 CANCERLIT on STN
AN 97048854 CANCERLIT
DN 97048854 PubMed ID: 8893584
TI Detection of **Barrett**'s adenocarcinoma of the gastric cardia with sucrase isomaltase and p53.
AU Iannettoni M D; Lee S S; Bonnell M R; Sell T L; Whyte R I; Orringer M B; Beer D G
CS Department of Surgery, University of Michigan, Ann Arbor 48109-0344, USA.
SO ANNALS OF THORACIC SURGERY, (1996 Nov) 62 (5) 1460-5; discussion 1465-6. Journal code: 15030100R. ISSN: 0003-4975.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS MEDLINE; Abridged Index Medicus Journals; Priority Journals
OS MEDLINE 97048854
EM 199612
ED Entered STN: 19970108
Last Updated on STN: 19970108
AB BACKGROUND: Routine surveillance for dysplastic epithelium in patients with **Barrett**'s esophagus has markedly improved prognosis. Many patients with short segments of **Barrett**'s mucosa near the esophagogastric **junction** remain undiagnosed and at risk for the development of **Barrett**'s adenocarcinomas (BA). Sucrase isomaltase (SI), an intestinal enzyme, is highly expressed in intestinal-type **Barrett**'s mucosa and frequently expressed in dysplastic **Barrett**'s mucosa and BA. **Sucrose** isomaltase is not expressed in normal esophageal or gastric mucosa. Alterations in the p53 tumor suppressor gene are frequent events in dysplastic **Barrett**'s mucosa and BA and result in nuclear protein accumulation. The purpose of this study was to determine the presence or absence of these markers of **Barrett**'s mucosa in adenocarcinoma of the esophagogastric **junction** or cardia. METHODS: Expression

of SI and p53 were examined in 40 BAs and 25 cardia adenocarcinomas using immunohistochemical techniques. RESULTS: **Sucrose** isomaltase analysis revealed positive staining in 55% (22/40) of the BAs and 44% (11/25) of the cardia adenocarcinomas. Of 14 cardia adenocarcinomas that were SI negative, 100% (14/14) had no associated **Barrett**'s mucosa. However, in 21 cardia adenocarcinomas with no associated **Barrett**'s mucosa, 7/21 (33%) were SI positive. This suggests that SI-positive tumors may represent BA without the standard definition of **Barrett**'s esophagus being met. P53 was present in 65% of BAs and 64% of cardia adenocarcinomas, demonstrating the importance and similarity of this gene alteration in both tumor types. Staining was positive for SI or p53 in 77% (50/65) of all tumors. Tumors of lower stage expressed SI more often than higher stage tumors. CONCLUSIONS: These data suggest that a subset of cardia adenocarcinomas represent BAs. Surveillance endoscopy incorporating additional esophagogastric **junction** biopsies and assessment of SI or p53 may improve detection of intestinalized **Barrett**'s mucosa and early dysplastic changes.

CT Check Tags: Female; Human; Male
*Adenocarcinoma: GE, genetics
*Adenocarcinoma: ME, metabolism
Aged
Aged, 80 and over
***Barrett Esophagus: CO, complications**
Cardia
*Gene Expression Regulation, Neoplastic
*Genes, p53: GE, genetics
Immunohistochemistry
Middle Age
Prognosis
Retrospective Studies
Sensitivity and Specificity
*Stomach Neoplasms: GE, genetics
*Stomach Neoplasms: ME, metabolism
*Sucrase-Isomaltase Complex: ME, metabolism
*Tumor Markers, Biological: ME, metabolism

CN 0 (Tumor Markers, Biological); EC 3.2.1.- (Sucrase-Isomaltase Complex)

=> => fil wpix
FILE 'WPIX' ENTERED AT 14:40:47 ON 03 JUN 2004

FILE LAST UPDATED: 3 JUN 2004 <20040603/UP>
MOST RECENT DERWENT UPDATE: 200435 <200435/DW>
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>>> THE DISPLAY LAYOUT HAS BEEN CHANGED TO ACCOMODATE THE NEW FORMAT GERMAN PATENT APPLICATION AND PUBLICATION NUMBERS. SEE ALSO:
http://www.stn-international.de/archive/stnews/news0104.pdf <<<

>>> SINCE THE FILE HAD NOT BEEN UPDATED BETWEEN APRIL 12-16 THERE WAS NO WEEKLY SDI RUN <<<

=> d all abeq tech abex tot

L163 ANSWER 1 OF 2 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN 2002-121441 [16] WPIX
DNN N2002-091088 DNC C2002-037136
TI Diagnosis of cancerous and precancerous conditions in the gastrointestinal tract e.g. **Barett's Esophagus**, by detecting a backleak of signature proteins or carbohydrates in a biological sample from the gastrointestinal tract.
DC B04 D16 S03
IN **MULLIN, J; THORTON, J**
PA (MULL-I) MULLIN J; (THOR-I) THORTON J; (LANK-N) LANKENAU INST MEDICAL RES
CYC 91
PI US 2001053534 A1 20011220 (200216)* 6 G01N033-574 <--
WO 2003050500 A1 20030619 (200341) EN G01N000-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001259741 A1 20030623 (200420) G01N033-574 <--
ADT US 2001053534 A1 Provisional US 2000-203271P 20000510, US 2001-853427 20010510; WO 2003050500 A1 **WO 2001-US15257 20010510**; AU 2001259741 A1 AU 2001-259741 20010510
FDT AU 2001259741 A1 Based on WO 2003050500
PRAI US 2000-203271P 20000510; US 2001-853427 20010510
IC ICM G01N000-00; **G01N033-574**
ICS C12Q001-37; **C12Q001-40**; G01N033-48
AB US2001053534 A UPAB: 20020308
NOVELTY - Cancerous or precancerous conditions are diagnosed in a mammal by obtaining a biological sample from a gastrointestinal site and detecting (by enzymatic or immunological assay) a backleak of at least one signature protein or signature carbohydrate, caused by leakiness of the tight junctional seal (tight junction) which surrounds epithelial cells in the epithelial tissue.

USE - The method enables non-invasive diagnosis of cancerous or precancerous conditions in mammals, by detection of signature proteins or carbohydrates in the bloodstream that have backleaked from the gastrointestinal tract.

The protein measured can be used in the diagnosis of particular conditions, e.g. salivary **amylase** levels in serum are useful in diagnosis of **esophageal** and gastric precancerous conditions such as **Barett's Esophagus**, atrophic gastritis and H. pylorii infection. Similarly, serum pepsin levels are useful in diagnosis of precancerous gastric conditions such as atrophic gastritis and H. pylorii infection, and serum trefoil factor levels may be used in diagnosis of precancerous leaks in the ileum and colon.

ADVANTAGE - The method is especially useful for non-invasive and inexpensive screening, which can indicate the need for more expensive and

involved endoscopic/colonoscopic follow-up procedures.
Dwg.0/0
FS CPI EPI
FA AB; DCN
MC CPI: B04-B04B; B04-B04D; B04-B04G; B04-B04L; B04-D01; B04-G01; B04-L05B; B04-L05C; B04-N02; B10-E04C; B11-C07; B11-C08E3; B12-K04A1; B12-K04A4; D05-H09
EPI: S03-E14H; S03-E14H4
TECH UPTX: 20020308
TECHNOLOGY FOCUS - BIOLOGY - Preferred Method: The signature protein is preferably salivary **amylase** (released into the first lumen of the gastrointestinal tract in saliva), pepsin (produced from pepsinogens I and II released into the stomach, and functional in the stomach and upper intestine) or trefoil factor (secreted into the lower intestine and colon). The signature carbohydrate is preferably mannitol or **sucrose.**
ABEX UPTX: 20020308
EXAMPLE - Venous blood (10 ml) was taken from patients presenting for endoscopic examinations and centrifuged to separate serum and cells. 1 ml aliquots of the serum supernatant were frozen (-70 degrees Centigrade). Aliquots were thawed and assayed for salivary **amylase** using a known enzymatic assay, in which an inhibitor selective specifically for the salivary form of the enzyme was used to differentiate between salivary and pancreatic forms. Saliva (diluted 1:1000 in PBS (phosphate buffered saline) plus 1 % BSA (bovine serum albumin)) was also analyzed. Blood levels and the blood level to saliva level ratio were grouped according to whether patients had normal endoscopic evaluations or whether cancerous/precancerous conditions were observed; patents with active ulcerations or actual bleeding in the upper gastrointestinal tract were omitted since the gastrointestinal tract barrier was breached macroscopically. A second marker solute for gastrointestinal permeability was also used, by asking patients to drink a **sucrose** solution (200 ml; 0.5 g/ml) the night before their endoscopy and measuring **sucrose** levels in overnight urine sample conventionally. No results concerning salivary **amylase** or **sucrose** levels are given in the specification.

L163 ANSWER 2 OF 2 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **1998-207533** [18] WPIX
DNN **N1998-164768** DNC **C1998-065534**
TI Composition for detection of gastrointestinal damage - uses combination of di saccharide(s) that have different degradation properties in the colon, small intestine and stomach.
DC B03 B04 J04 S03
IN MEDDINGS, J B
PA (MEDD-I) MEDDINGS J B
CYC 80
PI WO 9811440 A1 19980319 (199818)* EN 38 G01N033-574 <--
RW: AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW
AU 9741972 A 19980402 (199833) G01N033-574 <--
ZA 9708238 A 19990331 (199918) 36 A61K000-00
US 6037330 A 20000314 (200020) A01N043-04
ADT WO 9811440 A1 WO 1997-CA673 19970912; AU 9741972 A AU 1997-41972 19970912; ZA 9708238 A ZA 1997-8238 19970912; US 6037330 A Provisional US 1996-25898P 19960913, US 1997-926966 19970910
FDT AU 9741972 A Based on WO 9811440
PRAI US 1996-25898P 19960913; US 1997-926966 19970910
IC ICM A01N043-04; A61K000-00; **G01N033-574**

ICS A61K031-70
AB WO 9811440 A UPAB: 19980507
A composition for site specific detection of gastrointestinal (GI) damage comprises: (a) a first disaccharide (DS) that does not degrade in the colon, small intestine or stomach; (b) a second DS that degrades in the colon but does not degrade in the small intestine or stomach, and (c) a third DS that degrades to its monosaccharides in the small intestine and not in the stomach. Also claimed is a method for site-specific detection of GI damage in a patient comprising: (a) administering to the patient concurrently or sequentially DSs as in (A), and (b) assaying the patient's urine for the presence of the DSs administered in step (a) to determine the existence or extent of GI damage and the site of damage.

The compositions comprise sucralose, lactulose, **sucrose** and mannitol. The first DS is present in amount (in % by dry weight) 1-3, the second DS -10 and the third DS 87-95.The composition further comprises an aqueous carrier.

USE - The method and composition can be used for the detection of GI damage caused by e.g. ulcers, carcinoma or colitis.

ADVANTAGE - The method can provide for detection of site-specific GI damage, i.e. the stomach, small intestine or colon that is non-invasive and non-radioisotopic. In addition, the assay value for each DS can be correlated with control values to determine the magnitude of the GI damage at each affected site.

Dwg.0/8
FS CPI EPI
FA AB; DCN
MC CPI: B04-B04B1; B07-A02; B10-A07; B11-C08E; B12-K04A; J04-B01B
EPI: S03-E14H4

=> d his

(FILE 'HOME' ENTERED AT 13:09:43 ON 03 JUN 2004)
SET COST OFF

FILE 'REGISTRY' ENTERED AT 13:09:49 ON 03 JUN 2004
E SUCROSE/CN
L1 1 S E3
L2 8 S C12H22O11/MF AND SUCROSE
L3 8 S L1,L2
E AMYLASE/CN
L4 1 S E3
E AMYLASE
L5 3827 S E3 NOT L4
L6 13 S L5 AND SALIVA?
L7 3814 S L5 NOT L6

FILE 'HCAPLUS' ENTERED AT 13:11:43 ON 03 JUN 2004
E BARRET/CT
E E8+ALL
E E2+ALL
L8 330 S ESOPHAGUS?/CT (L) BARRETT?
L9 154 S ESOPHAGUS, DISEASE?/CT (L) BARRETT?
L10 433 S ?ESOPHAG?(L)?BARRET?
L11 433 S L8-L10
L12 19051 S L4
L13 14 S L6
L14 35080 S L7
L15 0 S L11 AND L12
L16 0 S L11 AND L13
L17 0 S L11 AND L14
L18 0 S L11 AND ?AMYLASE?
L19 65497 S L3

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L20           0 S L11 AND L19
L21           0 S L11 AND SUCROSE
L22          66 S ?ESOPHAG? AND L12-L14
L23          71 S ?ESOPHAG? AND ?AMYLASE?
L24         612 S ?ESOPHAG? AND 19
L25          92 S ?ESOPHAG? AND SUCROSE
L26         780 S L22-L25
                E ESOPHAGUS/CT
L27        8057 S E3-E29
                E E3+ALL
                E E8+ALL
L28        4621 S E8,E7+NT
                E E31
L29        1728 S E30-E40
L30          30 S L27-L29 AND L12-L14
L31          26 S L27-L29 AND ?AMYLASE?
L32          15 S L27-L29 AND L19
L33          49 S L27-L29 AND SUCROSE
L34         783 S L26,L30-L33
                E E36+ALL
L35        3590 S E21,E20+NT
L36           9 S L35 AND L12-L14,L19
L37           4 S L35 AND ?AMYLASE?
L38           8 S L35 AND SUCROSE
L39         783 S L34,L36-L38
L40          26 S L39 AND BARRET?
L41          26 S L40 AND L8-L40
L42           0 S L41 AND ?AMYLASE?
L43           0 S L41 AND SUCROSE
L44           0 S L41 AND JUNCTION
L45          11 S L41 AND ?MARKER?
L46           2 S US20010053534/PN OR (WO2001-US15257 OR US2000-203217#)/AP,PRN
                E MULLIN J/AU
L47         395 S E3-E22
                E THORTON J/AU
L48           1 S E4
L49           1 S L46 AND L47,L48
L50           2 S L47,L48 AND L8-L45
L51           1 S L50 NOT 75/SC
L52           3 S L47,L48 AND (?AMYLASE? OR SUCROSE)
L53           1 S L52 AND 9/SC
L54           1 S L51,L53
L55        4297 S (L4 OR L5 OR L6 OR L3)(L)ANT/RL
L56        6081 S (L4 OR L5 OR L6 OR L3)(L)ANST/RL
L57          83 S (L4 OR L5 OR L6 OR L3)(L)DGN/RL
L58           3 S L55-L57 AND L27-L29,L35
L59           2 S L58 NOT STURGEON
                E GASTROINTESTINAL/CT
                E E31+ALL
                E E2+ALL
L60         422 S L55-L57 AND E3+NT
                E E88+ALL
L61         201 S L55-L57 AND E4,E3+NT
L62          62 S L60,L61 AND (?NEOPLAS? OR ?CANCER? OR ?CARCIN? OR ?TUMOR? OR
L63           2 S L62 AND ?ESOPH?
L64          14 S L60,L61 AND TUMOR MARKERS+OLD,NT,PFT/CT
L65          14 S L63,L64
L66           6 S L64 AND SCREEN?
L67           2 S L57 AND L58,L59
L68          40 S L57 AND (BIOCHEM?(L)METHOD?)/SC,SX
L69         133 S L55-L57 AND (?NEOPLAS? OR ?CANCER? OR ?CARCIN? OR ?TUMOR? OR
L70          83 S L69 AND (BIOCHEM?(L)METHOD?)/SC,SX
L71           0 S L70 AND L27-L29,L35
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L72          31 S L70 AND (?DIGEST? OR ?GASTRO? OR ?GASTRI? OR ?INTESTIN?)
                SEL DN AN 20 22 23 31
L73           4 S L72 AND E1-E12
L74          52 S L70 NOT L72
                SEL DN AN 49 50 51
L75           3 S L74 AND E13-E21
L76           8 S L73,L75,L54 AND L8-L75
L77           8 S L76 AND (?AMYLASE? OR ?SUCROSE? OR ?SACCHARIDE? OR ?SUGAR?)
L78         816 S (L12-L14,L19 OR ?AMYLASE? OR ?SUCROSE?) AND ?LEAK?
L79        1148 S (L12-L14,L19 OR ?AMYLASE? OR ?SUCROSE?) AND ?JUNCTION?
L80        3704 S (L12-L14,L19 OR ?AMYLASE? OR ?SUCROSE?) AND ?PERMEAB?
L81         223 S L78-L80 AND ?EPITHEL?
L82         208 S L78-L80 AND (?NEOPLAS? OR ?CANCER? OR ?CARCIN? OR ?TUMOR? OR
L83          13 S L81 AND L82
L84           3 S L83 AND STOMACH
                SEL DN AN L84
                SEL DN AN L84 3
L85           1 S L84 AND E31-E33
L86           8 S L77,L85
L87           2 S L12-L14,L19 AND ?BARRET?
L88          20 S (?AMYLASE? OR ?SUCROSE? OR ?SACCHARID? OR ?SUGAR? OR ?CARBOHY
                SEL DN AN L88 12
L89           1 S L88 AND E34-E36
L90           9 S L86,L89
                SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 14:03:13 ON 03 JUN 2004
L91           4 S E37-E40 AND L1-L7

     FILE 'REGISTRY' ENTERED AT 14:03:53 ON 03 JUN 2004

     FILE 'HCAPLUS' ENTERED AT 14:04:00 ON 03 JUN 2004

     FILE 'BIOSIS' ENTERED AT 14:04:12 ON 03 JUN 2004
                E MULLIN J/AU
L92         186 S E3-E19
                E THORTON J/AU
L93           7 S E3-E5
L94         193 S L92,L93
L95           2 S L94 AND (?BARRET? OR ?ESOPHAG?)
L96           3 S L94 AND L3,L4
L97          21 S L94 AND (?AMYLASE? OR ?SUCROSE? OR ?SACCHARIDE? OR ?CARBOHYDR
L98          22 S L95,L96,L97
                SEL DN AN 1 2 4
L99           3 S L98 AND E1-E6
L100         99 S L94 AND (00520/CC OR (CONGRESS? OR CONFERENCE? OR POSTER? OR
L101         36 S L100 AND (JUNCTION OR ?LEAK? OR L98)
L102          7 S L101 AND L98
L103          1 S L102 AND ?BARRET?
L104          2 S L95,L103

     FILE 'BIOSIS' ENTERED AT 14:11:28 ON 03 JUN 2004

     FILE 'CANCERLIT' ENTERED AT 14:17:07 ON 03 JUN 2004
L105        282 S L3
L106       4995 S SUCROSE
L107          0 S L4,L6
L108       1935 S ?AMYLASE?
L109       6920 S L105,L106,L108
L110          2 S L109 AND ?BARRET?
                E ESOPHAG/CT
                E E79+ALL
L111      15455 S E2+NT
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                E ESOPHAGEAL CYSTS/CT
                E E6+ALL
L112        19083 S E3+NT
L113          154 S E34+NT
                E ESOPHAGEAL DISEASES/CT
L114          548 S E42+NT
L115        15455 S E83+NT
L116          187 S E126+NT
L117         1178 S E155+NT
                E E261+ALL
L118          523 S E8+NT
                E ESOPHAGOGASTRIC JUNCTION/CT
L119         4220 S E86+NT
                E HIS
L120           11 S L109 AND L111-L119
L121            2 S L120 AND ?BARRET?
L122            2 S L120 AND JUNCTION
L123            2 S L110,L121,L122
L124            9 S L120 NOT L123

     FILE 'CANCERLIT' ENTERED AT 14:22:49 ON 03 JUN 2004
                E TUMOR MARKERS/CT
                E E7+ALL
L125       131680 S E7+NT
L126          175 S L125 AND ?BARRET?
L127          144 S L125 AND L119
L128          647 S L125 AND L114-L118
L129            1 S L126-L128 AND L105,L106
L130            0 S L126-L128 AND L108
L131            0 S L129 NOT L123

     FILE 'WPIX' ENTERED AT 14:25:22 ON 03 JUN 2004
L132         6819 S ?AMYLASE?/BIX
                E AMYLASE/DCN
L133        13667 S SUCROSE/BIX
                E SUCROSE/DCN
                E E3+ALL
L134         5174 S E2 OR 0135/DRN
L135        22546 S L132-L134
L136            1 S L135 AND ?BARRET?/BIX
L137           68 S L135 AND ?ESOPHAG?/BIX
L138          137 S L135 AND A61P035/IC,ICM,ICS,ICA,ICI
L139         1144 S L135 AND P63?/M0,M1,M2,M3,M4,M5,M6
L140          874 S L135 AND (B14-E10? OR C14-E10? OR B12-J01 OR C12-J01)/MC
L141          922 S L137,L140
L142         1111 S L135 AND (B14-H? OR C14-H? OR B12-G07 OR C12-G07)/MC
L143          130 S L138,L139,L142 AND L141
L144           47 S L143 AND (P831 OR Q233 OR N136)/M0,M1,M2,M3,M4,M5,M6
L145           12 S L143 AND G01N033/IC,ICM,ICS
L146           18 S L143 AND (B12-K04 OR B12-K04A OR B12-K04A1 OR B12-K04E)/MC
L147            0 S L143 AND (C12-K04 OR C12-K04A OR C12-K04A1 OR C12-K04E)/MC
L148           19 S L143 AND (D05-H08 OR D05-H09)/MC
L149           10 S L143 AND S03-E14H?/MC
L150           49 S L144-L149
L151            1 S 20010053534/PN OR WO2001-US15257/AP,PRN
                E MULLIN J/AU
L152           43 S E3-E12
                E THORTON J/AU
L153            1 S E3
L154            1 S L152,L152 AND L135
L155           15 S G01N033-574/IC,ICM,ICS AND L135
L156          361 S C12Q001-40/IC,ICM,ICS
L157        22613 S L135,L156
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L158          16 S G01N033-574/IC,ICM,ICS AND L157
L159          16 S L154,L158
                 SEL DN AN 9
L160           1 S L159 AND E1-E3
L161           2 S L154,L160 AND L132-L160
L162           1 S L135 AND ?BARETT?/BIX
L163           2 S L161,L162

     FILE 'WPIX' ENTERED AT 14:40:47 ON 03 JUN 2004

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